

What Is Claimed Is:

1. A power unit, comprising:

an internal combustion engine comprising a crankcase defining a chamber therein, a crankcase suction port in fluid communication with the crankcase chamber, and at least one cylinder associated with the crankcase;

a second unit comprising a second unit case defining a second unit case chamber therein, distinct from the crankcase chamber, a second unit suction port in fluid communication with the second unit case chamber; and

a lubrication system for providing an oil supply for use in the internal combustion engine and the second unit, the lubrication system including a lubrication tank, a lubricant supply for supplying lubricant from the lubrication tank to at least one of the crankcase chamber and the second unit case chamber, a lubricant return for returning lubricant to the lubrication tank, and a first pump having an inlet in fluid communication with the second unit suction port and an outlet in fluid communication to the lubricant return, whereby operation of the first pump withdraws lubricant via the second unit suction port and returns lubricant to the lubrication tank.

2. The power unit according to claim 1, wherein the crankcase chamber is in fluid communication with the second unit case chamber.

3. The power unit of according to claim 2, further comprising a second pump having an inlet in fluid communication with the crankcase suction port and an outlet in fluid communication with the second unit case chamber, whereby operation of the second pump withdraws lubricant via the crankcase suction port and delivers lubricant to the second unit case chamber.

4. The power unit according to claim 2, wherein operation of the first pump withdraws lubricant via the crankcase suction port and delivers lubricant to the second unit case chamber and withdraws lubricant via the second unit suction port and returns lubricant to the lubrication tank.

5. The power unit according to claim 2, wherein the first pump returns lubricant to the lubricant tank via the crankcase chamber.

6. The power unit according to claim 5, wherein the outlet of the first pump is in fluid communication with the lubricant return via the crankcase chamber.

7. The power unit according to claim 6, further comprising a second pump having an inlet in fluid communication with the crankcase suction port and an outlet in fluid communication with the lubricant return, whereby operation of the second pump withdraws lubricant via the crankcase suction port and delivers lubricant to the lubricant return.

8. The power unit according to claim 5, wherein the inlet of the first pump is in fluid communication with the second unit suction port via the crankcase chamber.

9. The power unit according to claim 1, further comprising a second pump having an inlet in fluid communication with the crankcase suction port and an outlet in fluid communication the lubricant return, whereby operation of the second pump withdraws lubricant from the crankcase suction port and returns lubricant to the lubrication tank.

10. The power unit according to claim 1, wherein the inlet of the first pump is also in fluid communication with the crankcase chamber suction port.

11. The power unit according to claim 1, wherein the second unit is a transmission for transmitting power from the internal engine to drive a vehicle.

12. The power unit according to claim 1, wherein a plurality of transmission gears are located within the second unit case.

13. The power unit according to claim 1, wherein the second unit is a clutch for coupling and decoupling the internal combustion engine to/from from another component in a vehicle drive system.

14. The power unit according to claim 1, wherein the second unit includes a valve system for operating intake and exhaust valves of the internal combustion engine.

15. The power unit according to claim 1, further comprising a power unit case, the power unit case having a crankcase portion forming at least a portion of the crankcase and a second unit portion forming at least a portion of the second unit, and wherein the crankcase portion and the second unit portion are integrally formed.

16. The power unit according to claim 1, wherein the lubricant system includes a third pump having an inlet in fluid communication with the lubricant tank and a outlet in fluid communication with the lubricant supply.

17. The power unit according to claim 1, further comprising a third unit comprising a third unit case defining a third unit case chamber therein, distinct from the crankcase chamber and the second unit case chamber and in fluid communication with each, a third unit suction port in fluid communication with the third unit case chamber; and

wherein the operation of the first pump withdraws lubricant via the crankcase suction port and delivers lubricant to the third unit case chamber and withdraws lubricant via the third unit suction port delivers lubricant to the second unit case chamber and withdraws lubricant via the second unit suction port and returns lubricant to the lubrication tank.

18. The power unit according to claim 1, further comprising a third unit comprising a third unit case defining a third unit case chamber therein, distinct from the crankcase chamber and the second unit case chamber and in fluid communication with the second unit case chamber, a third unit suction port in fluid communication with the third unit case chamber; and

wherein the operation of the first pump withdraws lubricant via the third unit suction port and delivers lubricant to the second unit case chamber and withdraws lubricant via the second unit suction port and returns lubricant to the lubrication tank.

19. The power unit according to claim 1, further comprising:

a second pump having an inlet in fluid communication with the crankcase suction port and an outlet in fluid communication the lubricant return, whereby operation of the second pump withdraws lubricant from the crankcase suction port and returns lubricant to the lubrication tank;

a third unit comprising a third unit case defining a third unit case chamber therein, distinct from the crankcase chamber and the second unit case chamber, a third unit suction port in fluid communication with the third unit case chamber; and

a third pump having an inlet in fluid communication with the third unit suction port and an outlet in fluid communication the lubricant return, whereby operation of the third pump withdraws lubricant from the third suction port and returns lubricant to the lubrication tank.

20. The power unit according to claim 1, further comprising a third unit comprising a third unit case defining a third unit case chamber therein, distinct from the crankcase chamber and the second unit case chamber and in fluid communication with the second unit case chamber, a third unit suction port in fluid communication with the third unit case chamber; and wherein the outlet of the first pump is in fluid communication with the lubricant return via the third unit case chamber.

21. The power unit according to claim 1, further comprising:

a third unit comprising a third unit case defining a third unit case chamber therein, distinct from the crankcase chamber and the second unit case chamber and in fluid communication with the second unit case chamber, a third unit suction port in fluid communication with the third unit case chamber, wherein the crankcase chamber is in fluid communication with the second unit case chamber, and wherein the operation of the first pump also withdraws lubricant via the third unit suction port and delivers lubricant to the second unit case chamber and withdraws lubricant via the crankcase suction port and delivers lubricant to the second unit case chamber.